



**PAYMENTS
CANADA**

MODERNIZING CANADIAN PAYMENTS

A VISION FOR THE CANADIAN
PAYMENTS ECOSYSTEM

Companion Reader
APRIL 2016

payments.ca

AT THE HEART OF OUR ECONOMY

is a national payments system, safely circulating billions of dollars each day. But the payments system must modernize to support the rapidly changing needs and expectations of the Canadian marketplace, foster innovation and strengthen competition within the payments ecosystem.

CANADA HAS AN OPPORTUNITY

to learn from modernization initiatives around the world and set its own path towards a world-class payments system capable of sustaining a globally competitive economy.

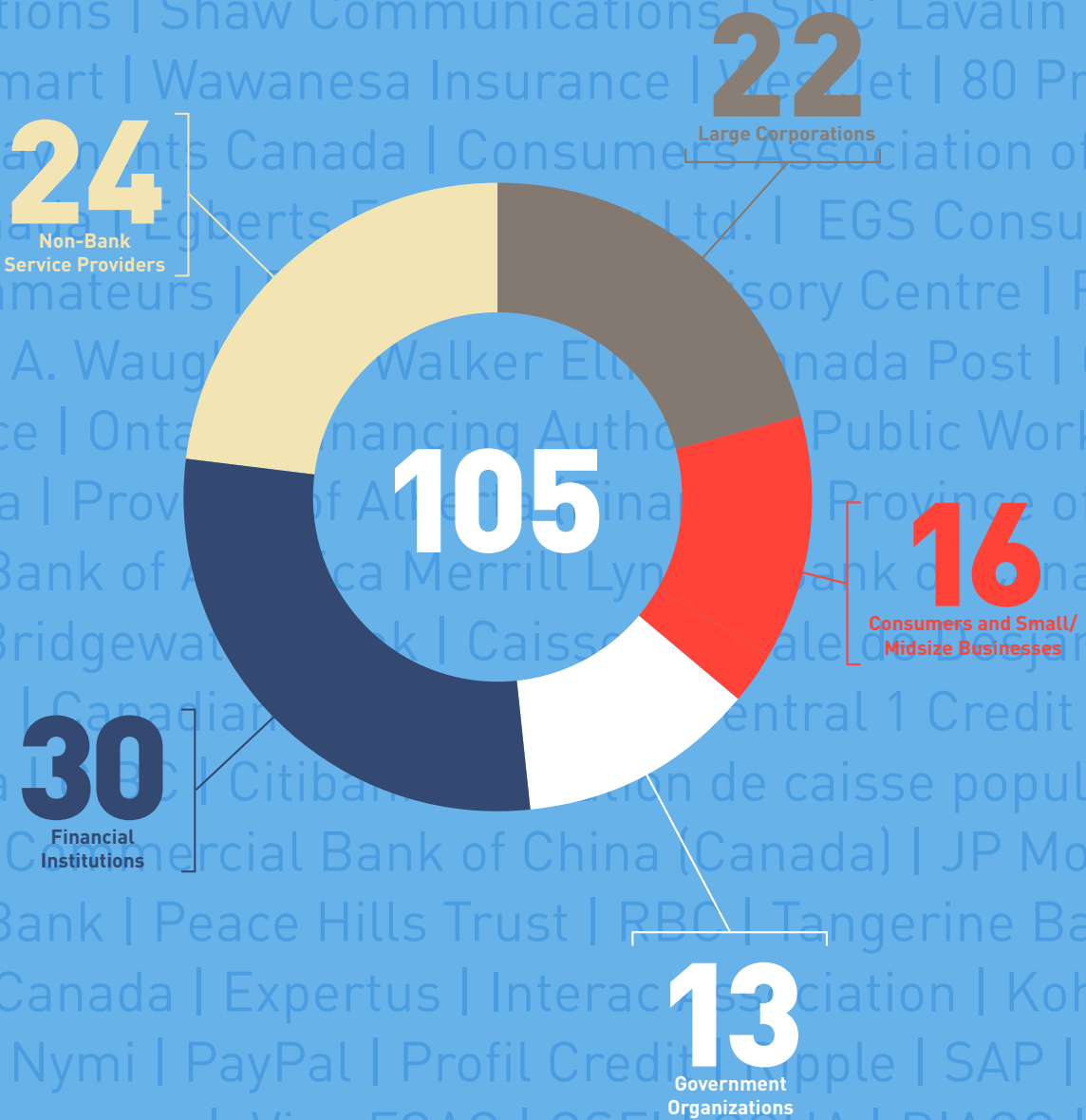
To address this opportunity, Payments Canada is currently undertaking a multi-year initiative to modernize Canada's payments system. The first step in this initiative was to conduct in-depth research and consult with a broad range of users and stakeholders in development of a vision for Canada's payments ecosystem.

This document provides a high-level overview of the key elements that formed this vision. It is the companion reader to Payments Canada whitepaper: "Developing a vision for the Canadian Payments ecosystem," which provides further detail about the development of the vision, the context for modernization, the evolving needs of stakeholders and users, lessons learned from around the world, and what Canada will gain with the adoption of a modern payments infrastructure.

About Payments Canada

Payments Canada ensures that financial transactions in Canada settle safely and securely each day. Payments Canada underpins the Canadian financial system and economy by owning and operating Canada's payment clearing and settlement infrastructure, including associated systems, by-laws, rules and standards. The value of payments cleared and settled by Payments Canada in 2015 was nearly \$50 trillion, or \$197 billion every business day. These encompass a wide range of payments made by Canadians and businesses involving inter-bank transactions, including those made with debit cards, pre-authorized debits, direct deposits, bill payments, wire payments and cheques.






ORGANIZATIONS CONSULTED

Payments Canada retained global consulting firm McKinsey & Company to support the vision work. The two organizations have worked closely together since mid 2015, conducting research and holding stakeholder workshops and interviews, which fed into the fact-based analysis for the vision.





A VISION FOR THE CANADIAN PAYMENTS ECOSYSTEM

A MODERN PAYMENTS
SYSTEM THAT IS FAST,
FLEXIBLE AND SECURE,
PROMOTES INNOVATION
AND STRENGTHENS
CANADA'S COMPETITIVE
POSITION.



THE WORLD IS CHANGING. SO ARE PAYMENTS.

The global payments landscape is in the midst of rapid and extensive change. Technological, social and economic developments are challenging payments systems around the world to keep pace.

What is changing?



THE ERA OF 'OMNICOMMERCE'

The mass adoption of new technologies has set the expectation for commerce to be available anytime and anywhere.



WE EXPECT MORE, FASTER

Consumers and businesses are demanding increasingly convenient, flexible, simple payment experiences with the same level of security and privacy.



NEW PLAYERS ARE CHANGING THE GAME

New players and technologies are entering the payments arena, including some of the world's largest and most innovative companies.



DIGITAL DISRUPTION IS HAPPENING

Innovative technologies are challenging traditional payments systems. This includes new and innovative product offerings as well as new opportunities for cyber-attackers to exploit them.



INTERNATIONAL INVESTMENT

Around the world, investments in payments infrastructure are being made to drive economic growth and efficiency, while pushing for global standards for near-instant, data-rich payments.



REGULATORY ENVIRONMENT

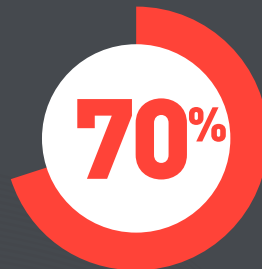
Central banks and regulators are taking a more active interest in payments, resulting in increasing oversight internationally and new demands for risk management to ensure safe and secure payments.



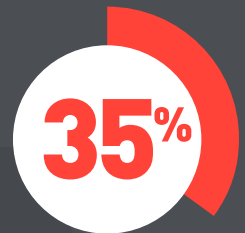
"To maintain Canada's competitive position, and to support innovation at home, we need to proactively and appropriately respond to the external forces that are currently reshaping the global payments ecosystem. We must ensure that our payments infrastructure, and our regulatory system, are equipped to leverage innovation for Canada's gain."

— GERRY GAETZ
President and CEO, Payments Canada

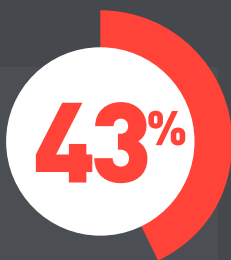
Canadians have been quick to embrace new technology and digital payments.



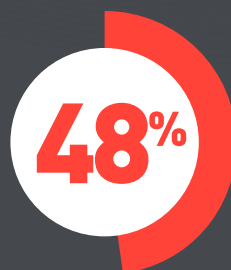
of Canadians own a smartphone.



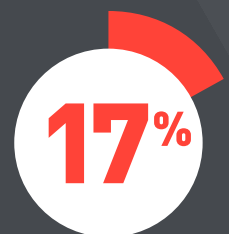
of Canadians reported using mobile banking in the last year.



of Canadians expect to conduct banking using mobile devices in the future



of Canadians now use online banking as their primary method of bill payment



decline in use of cash by Canadians between 2008 and 2014



Building on our strong foundation, and using lessons from modernization projects around the world, we can reclaim our position as one of the world's payments leaders. But we need to act now and adapt to the rapidly changing landscape."

— JEFF VAN DUYNHOVEN
Executive Director, Modernization Program, Payments Canada

As the pace of change **accelerates**,
Canada will face growing challenges
to **remain competitive.**

THE TIME TO ACT IS NOW

Our payments infrastructure is widely recognized as one of the most secure in the world. But, as other economies have moved to faster, data-rich, 24/7/365 payments, our core clearing and settlement payment systems are

becoming increasingly outdated. To support the long-term growth of Canada's economy, payments modernization is required.





"Consultation with payment system participants and users is at the heart of this vision. As we look forward, it will be vital to deliver solutions that meet the expectations of businesses, institutions and users of Canada's payments ecosystem."

— CAROLYN BURKE
Chair, Payments Canada Member Advisory Council



WHAT CANADIANS NEED AND EXPECT FROM PAYMENTS

Today, end users expect 'instant' and 'always on' experiences and, in many cases, near real-time, data-rich payments. End users also want the ability to route payments using readily available information, to receive notifications that describe payment status, and to be able to initiate and receive payments 24/7/365.

DEFINING A MODERN PAYMENTS SYSTEM

Fast payment options

A modern system should make near real-time payments available in all cases where it is beneficial.

EXAMPLE

A parent forgets to send a cheque for a class trip, but is able to quickly send funds so her son confirms his spot before the deadline.

Data-rich payments

In Canada, ISO 20022 is being pursued as the global message standard to provide expanded and standardized information with each payment.

EXAMPLE

A company receives a payment that automatically reconciles in its accounting system against the invoice that was paid.

Transaction transparency

Notifications to payor and payees should provide updates on the status of payments.

EXAMPLE

A new homeowner is notified that their mortgage funds have been deposited and the keys officially belong to them.

Easier payments

Payments should be possible with just an e-mail address, telephone number or even social media handle.

EXAMPLE

A shopper returns an item to a clothing retailer who easily provides a credit using only the shopper's email address, without requiring bank account information.

Cross-border convenience

Consumers and businesses should have access to practical and convenient methods to make payments to those in other countries.

EXAMPLE

A Canadian with a condo in the Sunbelt finds it is much simpler to pay their property taxes in the U.S.

Activity-based oversight

Rules and regulations should focus on services provided, instead of the type of institution that provides them.

EXAMPLE

Whether using the latest app or a cheque, Canadians know their payments are safe and private.

Open and risk-based access

Foster competition and innovation, and clearly define requirements for payment system access – without compromising security.

EXAMPLE

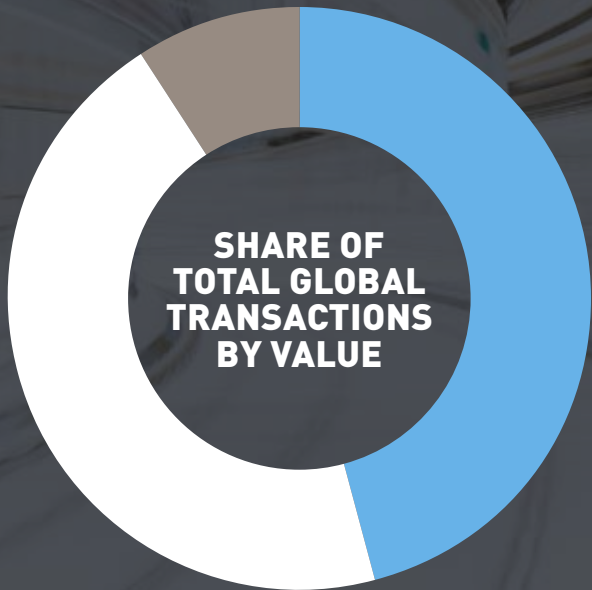
A startup enters the payments ecosystem, providing a valuable new payment service to Canadian consumers and small businesses.

A platform for innovation

The payments system should be flexible and adaptable, providing a platform for innovation, decreasing costs and delivering ongoing efficiencies to payors and payees.

EXAMPLE

A financial institution leverages the payments system to create a new and unique mobile payment app.



Brazil
Chile
China
Czech Republic
Denmark
India
Japan
Korea
Mexico
Nigeria
Poland
Singapore
South Africa
Sweden
Switzerland
Taiwan
UK

Australia
Bahrain
Canada
Colombia
EU
Finland
Indonesia
Kazakhstan
Netherlands
Norway
Saudi Arabia
Spain
Thailand
Turkey
USA

45%
"LIVE"

46%
PLANNING,
DESIGNING
OR BUILDING

THE WORLD IS MOVING TO FASTER PAYMENTS WITH MORE DATA

Around the world, countries are modernizing their core payments infrastructure. To date, 17 countries have modernized, while a second wave is currently undertaking modernization projects. As part of its vision, Payments Canada studied these global efforts to understand best practices for modernizing a national payments system.

What we've learned from other countries

- Each market has its own unique issues and requires its own solution to meet a broad set of user needs
- Implementing a new system can be more efficient than upgrading an existing one
- Enhancing existing infrastructure may be necessary in the short term
- Migration from old systems to new ones should be done gradually over time
- It is important to work closely with the financial sector to ensure new and innovative services arise
- ISO 20022 has become the global message standard for payments



"The Clearing House in the United States is in the midst of a payment modernization project that will see real-time payments supported in early 2017. While it's important to chart our own course, our payments systems must work seamlessly with our biggest trading partner."

— JEFF VAN DUYNHOVEN
Executive Director, Modernization Program, Payments Canada

THE EMERGING GLOBAL STANDARD: ISO 20022

ISO 20022 is an international messaging framework that allows significantly more information, such as invoice data, to travel with electronic payments. The standard enables solutions and technologies for business automation, including end-to-end straight-through processing and reconciliation, easier payment tracking and system reconciliation. Since ISO 20022 is a common, global 'language' for financial communications, it also has the potential to make cross-border payments much more efficient over time. ISO 20022 is widely considered an essential component to modernizing any payments infrastructure.

To date, 30 countries – including the U.S., Eurozone, and Japan – have adopted or are planning to adopt ISO 20022 as a payment message standard.



"While the features required of a modern payments system are now clear, payments must remain safe and private, as they have always been here in Canada."

— CAROL ANN NORTHCOTT
Vice-President and Chief Risk Officer, Payments Canada

DEFINING OUR MODERN PAYMENTS SYSTEM

The vision work identified the needs of the Canadian marketplace and what our global counterparts have done to meet similar needs in their jurisdictions. In analyzing these findings, it becomes clear that there are five key features to a modern Canadian payments system.

Fast

Transactions are processed in near real-time

Efficient

Posting to accounts occurs quickly, making funds available sooner

Easy

Transferring funds is made easier through use of common identifiers like an email address

Convenient

Each transaction provides status notifications and standardized payment information

Interoperable

Domestic and cross-border commerce is seamless due to standardized protocols



"Payments Canada's modernization initiative offers a tremendous opportunity to support innovation and meet the needs of payments system participants and users. Continued collaboration will ensure a modernized payments system serves Canada well into the future."

— BRENT MIZZEN
Chair, Payments Canada Stakeholder Advisory Council

OVERALL BENEFITS OF MODERN PAYMENTS

Efficiencies for businesses due to transaction data and straight-through processing

Commerce is more convenient, fluid and ubiquitous

Innovative products and services enhance the payment experience

Lower overall risk associated with payments due to guaranteed 'good funds'

The global competitiveness of the Canadian economy is supported



"Our vision is a fast, flexible and secure payment system that will promote innovation and strengthen Canada's competitive position. The extensive work we have done in developing this national vision allows us to move forward with confidence and in collaboration with the industry."

— GERRY GAETZ
President and CEO, Payments Canada

MOVING FORWARD WITH CONFIDENCE

The Vision captures the aspirations, characteristics and attributes needed for a modern Canadian payments ecosystem. The who, when and how of delivering on that vision will be answered through the next phase of Payments Canada's multi-year modernization project.

Summary of next steps

1

Define business requirements

2

Define and evaluate solution options to meet the business requirements

3

Identify and implement short-term opportunities to improve existing systems

4

Implementation of solution(s) on a prioritized basis over several years





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